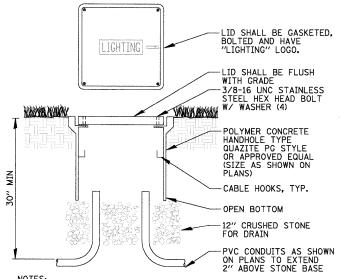
LIGHTING GENERAL NOTES

- ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A PERMIT FROM THE CITY BEFORE THE START OF WORK.
- THE EXACT LOCATIONS OF ALL UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE LIGHTING SYSTEM. FOR THE LOCATIONS OF THE UTILITIES, CALL JULIE TOLL FREE AT 1-800-892-0123.
- THE WORK PERFORMED UNDER THIS CONTRACT SHALL IN NO WAY INTERFERE WITH THE NORMAL OPERATION OF ANY EXISTING UTILITY SERVICE. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ITEMS OF EQUIPMENT REQUIRED TO MAINTAIN SUCH NORMAL OPERATION AT NO ADDITIONAL COST TO THE OWNER. THE COST ASSOCIATED FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE CONTRACT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS INCLUDING ALL ABOVE AND BELOW GRADE APPURTENANCES. THE CONTRACTOR SHALL REPAIR ALL DAMAGE TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE, AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING SPECIFICATIONS, WHICH ARE HEREBY MADE A PART HEREOF:
 - "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS", AS PREPARED BY IDOT.
 "THE NATIONAL ELECTRICAL CODE."
- THE CONTRACT DRAWINGS AND SPECIFICATIONS ARE NOT INTENDED TO SHOW EVERY AND ALL DETAILS OF WORK TO BE PERFORMED OR EQUIPMENT TO BE SUPPLIED. THE INTENT OF THE CONTRACT DRAWINGS AND SPECIFICATIONS IS TO ILLUSTRATE THE CONCEPTUAL DESIGN AND LAYOUT. THE CONTRACTOR SHALL BE KNOWLEDGEABLE AND REGULARLY ENGAGED IN THE TYPE OF WORK DESCRIBED BY THESE CONTRACT DRAWINGS AND SPECIFICATIONS AND SHALL BE RESPONSIBLE FOR UNDERSTANDING THEIR INTENT. ANY WORK TO BE PERFORMED OR ITEM OF EQUIPMENT TO BE SUPPLIED WHICH IS NOT SPECIFICALLY CALLED FOR BY THESE CONTRACT DRAWINGS AND SPECIFICATIONS, BUT WHICH IS NECESSARY TO PROVIDE A COMPLETE AND SUCCESSFUL WORKING SYSTEM SHALL BE INCLUDED IN THE CONTRACTOR'S SCOPE OF WORK AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL SUBMIT SPECIFICATIONS, DRAWINGS AND CATALOG CUTS FOR ALL MATERIALS TO THE OWNERS REPRESENTATIVE FOR REVIEW BEFORE ORDERING ANY MATERIALS FOR PROJECT.
- THE INSTALLATION OF THE WARNING TAPE SHALL BE REVIEWED BY THE OWNER'S REPRESENTATIVE PRIOR TO BACKFILLING, AS APPLICABLE.
- IT IS THE CONTRACTOR'S RESPONSIBILITY FOR TIMELY NOTIFICATION AND COORDINATION WITH THE CITY OF NORTHLAKE AND OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL TAG ALL WIRES WITH WIRE MARKERS INDICATING THE CIRCUIT ID IN EVERY POLE BASE, HAND HOLE AND SPLICE/CONNECTION POINT.
- 12. ALL UNDERGROUND WIRING SHALL BE MINIMUM *8 COPPER (OR SIZE AS SHOWN ON THE PLANS) XLP TYPE-USE, EXTRA ABRASION RESISTANCE, 600 VOLTS, INSTALLED IN SCH 40 HDPE CONDUITS. ALL CONDUITS SHALL BE INSTALLED IN TRENCH A MINIMUM 30 INCHES BELOW FINISHED GRADE, OR AS SHOWN ON THE PLANS.
- 13. UPON COMPLETION OF THE IMPROVMENTS TO EXISTING LIGHTING SYSTEMS THE CONTRACTOR SHALL REQUEST IN WRITING A REQUEST FOR PREFINAL INSPECTION A MINIMUM OF THREE DAYS NOTICE TO THE CITY AND THE OWNER'S REPRESENTATIVE. THE CITY OF NORTHLAKE SHALL BE THE ULTIMATE MAINTAINING AGENCY FOR THE LIGHTING SYSTEM.
- 14. THE ELECTRICAL CONTRACTOR SHALL FURNISH TWO FULL SIZE SETS OF RECORD DRAWINGS TO THE OWNER'S REPRESENTATIVE UPON COMPLETION OF THE LIGHTING AND ELECTRICAL IMPROVEMENTS. THE DRAWINGS SHALL SHOW THE INSTALLED LOCATION OF ALL LIGHTS, UNDERGROUND WIRING, HANDHOLES & CONTROLLER CABINETS.
- 15. THE CONTRACTOR SHALL PROVIDE A GUARANTEE FOR ALL MATERIAL AND WORKMANSHIP FOR ONE YEAR AFTER THE DATE OF ACCEPTANCE.
- 16. THE CONTRACTOR SHALL PERFORM ELECTRICAL TESTING IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE. THE ELECTRICAL TESTING SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

SUSPENDED CONDUIT NOTES

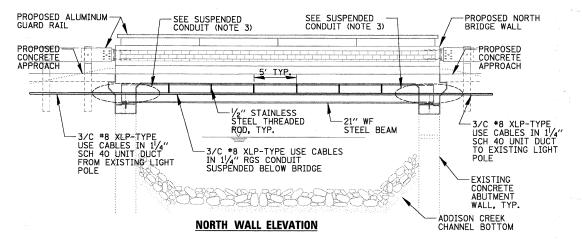
- HANGER SPACING SHALL NOT EXCEED 5'. INSTALLATION AND MATERIALS FOR HANGER INSTALLATION SHALL BE INCIDENTAL TO COST OF "CONDUIT ATTACHED TO STRUCTURE"
- THE CONTRACTOR MUST USE APPROVED SINGLE FLARED COIL LOOP INSERTS, WITH A 4" MAX. INSERT LENGTH. THE FLARED LOOP INSERTS MUST BE CAST INTO THE CONRETE SLAB. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND COORDINATING THE INSERT LOCATIONS WITH
- 3. PROVIDE EXPANSION/DEFLECTION FITTINGS FOR CONDUIT AS REQUIRED BY THE MANUFACTURER. THESE FITTINGS ARE TO ACCOMMODATE A TOTAL MOVEMENT UP TO 4" (2" IN EACH DIRECTION). THE CONTRACTOR SHALL FOLLOW THE MANUFACTURER'S RECOMMENDATION FOR INSTALLATION TEMPERATURE. COST AND INSTALLATION OF EXPANSION/DEFLECTION FITTINGS SHALL BE INCIDENTAL TO COST OF THE "CONDUIT ATTACHED ATTACHED TO STRUCTURE" PAY ITEM.
- 4. ALL HANGER HARDWARE, INCLUDING NUTS, LOCK WASHERS, BOLTS, ETC., SHALL BE STAINLESS STEEL.

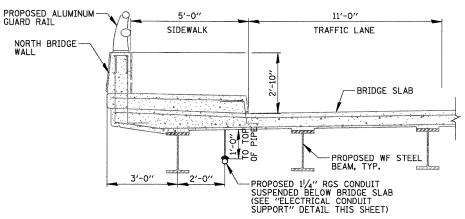


NOTES:

- 1. NO SPLICES ALLOWED IN CONCRETE HANDHOLES.
- 2. POLYMER CONCRETE HANDHOLE AND LID SHALL BE GREEN IN LANDSCAPED AREAS AND MATCH COLOR IN CONCRETE/BRICK AREAS.
- 3. BOX & LID SHALL MEET/EXCEED ANSI TIER 15 LOADING REQUIREMENTS AND BE UL LISTED.

COMPOSITE CONCRETE HANDHOLE





SECTION A-A

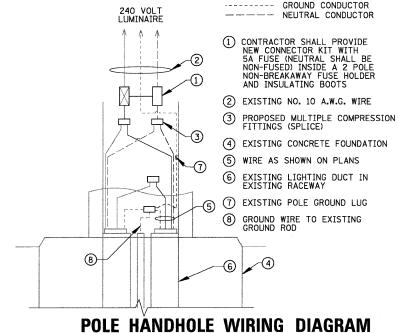
PROPOSED CONDUIT SUSPENDED BELOW BRIDGE

| No. 1 n. 2 n. | | | | | | | | | | | |
|--|------------------------|-----------------|-----------|------------------------------|--|------|------------------|-----------|-----------|------|--|
| FILE NAME = | USER NAME = PRAZALAN | DESIGNED - KB | REVISED - | · | LIGHTING DETAILS | F.A. | SECTION | COUNTY | TOTAL SI | HEET | |
| N:\NORTHLAKE\940032HR204\Mech\LDT_9400 | 32hr2Ø4_Ø2.SHT | DRAWN - KB | REVISED - | STATE OF ILLINOIS | LIGHTING DETAILS | NIC. | 09-00071-00-BR | COOK | 31 | 12 | |
| | PLOT SCALE : N.T.S. | CHECKED AJD | REVISED - | DEPARTMENT OF TRANSPORTATION | | | 03 00011 00 Bit | CONTRACT | T NO. 634 | 37 | |
| | PLOT DATE = 11/30/2009 | DATE - 09/30/09 | REVISED - | | SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA. | | ILLINOIS FED. AI | D PROJECT | | - | |

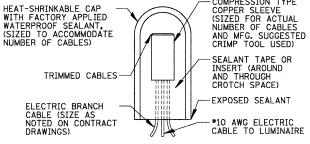
LIGHTING BILL OF MATERIALS

| | CODE NO. | DESCRIPTION | UNIT | QUANTITY |
|---|-----------|---|------|----------|
| | 81017515 | CONDUIT IN TRENCH, 11/4" DIA., COILABLE NONMETALLIC CONDUIT | FOOT | 75 |
| | 81030100* | CONDUIT SPLICE | EACH | 1 |
| | 81100400 | CONDUIT ATTACHED TO STRUCTURE, 11/4" DIA., GALVANIZED STEEL | FOOT | 45 |
| | 81400730 | HANDHOLE, COMPOSITE CONCRETE | EACH | 1 |
| | 81702120 | ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8 | FOOT | 600 |
| | 81900200 | TRENCH AND BACKFILL FOR ELECTRICAL WORK | FOOT | 75 |
| | 89502300 | REMOVE ELECTRIC CABLE FROM CONDUIT | FOOT | 600 |
| | X0323710* | REMOVE CONDUIT ATTACHED TO STRUCTURE | F00T | 45 |
| Ì | X0323927* | MAINTENANCE OF LIGHTING SYSTEM | EACH | 1 |
| | Z0025100* | FURNISHING AND INSTALLING CABLE SPLICES | EACH | 2 |
| | | | | |

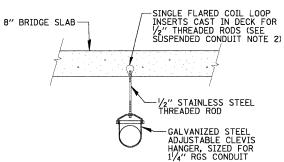
* SEE CONTRACT SPECIAL PROVISIONS



PHASE CONDUCTOR



SPLICING ELECTRIC CABLE



ELECTRICAL CONDUIT SUPPORT